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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,038	10/27/2003	Kevin T. O'Dougherty	N95.12-0015	3887
7590 01/06/2006 William F. Ryann ATMI, Inc. 7 Commerce Drive Danbury, CT 06810			EXAMINER PRICE, CRAIG JAMES	
			ART UNIT 3753	PAPER NUMBER
DATE MAILED: 01/06/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

7/2/04

Office Action Summary	Application No.	Applicant(s)	
	10/694,038	O'DOUGHERTY ET AL.	
	Examiner	Art Unit	
	Craig Price	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 3, 15 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-14, 16-20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/29/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Figure 2.

DETAILED ACTION

1. The restriction requirement of 11/17/05 is vacated.

Election/Restrictions

2. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species A is defined as Figures 5b.

Species B is defined as Figure 5c.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1,2,6-14,17-20 and 24 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

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are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. During a telephone conversation with Mr. David Fairbairn on 15 December 2005 a provisional election was made with traverse to prosecute the species of Figure 5b, claims 1,2,4-14,16-20,22-24. Affirmation of this election must be made by applicant in replying to this Office action. Claims 3,15 and 21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Claims 1-24 are pending.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1,6,7,13,17,18,19 and 24 are rejected under 35 U.S.C. 102(a) as being anticipated by Priebe et al.(US 2003/0075566).

Regarding claim 1, Priebe et al. disclose a liquid dispensing and recirculating system comprising, a container (42) having a mouth (46), a cap (see attached sheet figure 2) for coupling with the mouth, a connector (44, connector head) for coupling with the cap, the connector further comprising, a connector head, and a probe (50) extending from the connector head and insertable through the cap and into the mouth, the probe having a flow passage therein which terminates near a probe tip, pump means coupled (Page 4,para.0069) with the probe and with the flow passage (56) for pumping fluid in the container through the probe and the flow passage, and fluid return means (Figure 6,112,114,116) formed (116) on the probe for returning recirculated fluid to the fluid in the container such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container (Page 4, para. 0062, The flow of the re-circulated liquid...causes much less liquid turbulence and formation of air bubbles...).

Regarding claim 6, Priebe et al. disclose that the fluid return means includes a bore (60) formed at the area proximate to the connector head for delivering the recirculated fluid to the fluid return means.

Regarding claim 7, Priebe et al. disclose that the bore is sized such that

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recirculated fluid remains within the fluid return means as it is returned to the container (Page 3, para.0053 thru 0056).

Regarding claim 13, Priebe et al. disclose that the pressure assist port (Figure 4A) that is coupled to an external pressure source for introducing pressurized gas into the container to facilitate flow of the fluid from the container (Page 4, para.0067).

Regarding claims 17-19 and 24, the device shown by Priebe et al. will perform the methods as recited in claims 17-19, and 24, during normal operational use of the device.

7. Claims 17, 18, 19 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Osgar (US 5,526,956).

Regarding claim 17, Osgar discloses that the means for the method of dispensing and recirculating liquids comprises a container (12) having a mouth (34) which communicates with an interior of the container, attaching a cap (14) over the mouth, coupling a connector (202, 212) to the cap, wherein the connector includes a probe (24, 26, 50, 208), defining a fluid passage (116) terminating within the interior of the container at a tip of the probe, defining a fluid return channel (60, 270) on the probe, dispensing fluid from the container through the fluid passage (268), and refilling fluid into the container through the fluid return channel such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container. The air releases up through the fluid after the fluid enters the container through the return channel (60).

Regarding claim 18, Osgar discloses that the steps of dispensing fluid from the

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container and refilling fluid into the container are performed simultaneously (Col.1, Lns.14-18).

Regarding claim 19, Osgar discloses that the step of refilling fluid into the container comprises of recirculating the dispensed liquid back into the container through the fluid return channel (Col 2, Lns. 10-13).

Regarding claim 24, Osgar discloses that the fluid return channel includes a bore (60,270) formed at the area proximate to the connector head for delivering the fluid to the fluid channel.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1,2,4,5,6,7,14,16,17-20,22,23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qutub (US 5,601,066) in view of Zoder (US 2,240,277).

Regarding claim 1, Qutub discloses a liquid dispensing and recirculating

fuel system comprising, a container (12) having a mouth (above 16,40, through the wall of the container), a probe (42), the probe having a flow passage therein which terminates near a probe tip (39), and fluid return means (Figure 5,43) formed on the probe for returning recirculated fluid to the fluid in the container such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container. The air "released above the fluid" is the ultimate destination of air from the fuel.

Qutub discloses all of the claimed invention except for a cap for coupling with the mouth, a connector having a connector head for coupling with the cap and pump means coupled with the probe and with the flow passage for pumping fluid in the container through the probe and the flow passage.

Zoder teaches the use of a fuel recirculating system having a cap (7) for coupling with the mouth, a connector (13) having a connector head for coupling with the cap and pump means coupled with the probe and with the flow passage for pumping fluid in the container through the probe and the flow passage (Col. 4, Lns. 32-35).

Firstly, In view of the Zoder patent, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize a cap for coupling with the mouth, a connector having a connector head for coupling with the cap as taught by Zoder onto the container of Qutub in order to permit replacement of the probe for service.

Secondly, In view of the Zoder patent, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize a pump as taught by Zoder onto

the system of Qutub coupled with the probe and with the flow passage for pumping fluid in the container through the probe and the flow passage, in order withdraw gasoline from the tank (Col. 4, Lns. 32-35).

Regarding claims 2,4 and 5, Qutub discloses that the fluid return means is a fluid channel (43), formed along an exterior of the probe from an area proximate to the connector head to an area proximate to the probe tip, having a uniform depth, extending along the probe substantially parallel with the flow passage, as seen in Figure 5.

Regarding claims 6 and 7, Qutub discloses that the fluid return means includes a bore (86,88) formed at the area proximate to the connector head for delivering the recirculated fluid to the fluid return means and the bore is sized such that recirculated fluid remains within the fluid return means as it is returned to the container as shown in Figure 7.

Regarding claims 14 and 16, Qutub discloses a probe (42) for dispensing liquid from and returning liquid to a container comprising of a flow passage (inside of 38) extending through the probe from a first end of the probe to a second end of the probe, a fluid return port (24) and a fluid return channel (43) in fluid communication with the fluid return port via a bore (86,88), the fluid return channel extending longitudinally along an exterior of the probe substantially parallel to the flow passage from the bore to about the second end of the probe (Figure 5).

Regarding claims 17-20,22,23 and 24, the device as combined with Qutub and Zoder will perform the methods as recited in claims 17-20, 22,23 and 24, during normal operational use of the device.

12. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Priebe et al. (US 2003/0075566) in view of Osgar et al. (US 5,875,921).

Priebe et al. disclose a liquid dispensing and recirculating system comprising, a container (42) having a mouth (46), a cap (see attached sheet figure 2) for coupling with the mouth, a connector (44, connector head) for coupling with the cap, the connector further comprising, a connector head, and a probe (50) extending from the connector head and insertable through the cap and into the mouth, the probe having a flow passage therein which terminates near a probe tip, pump means coupled (Page 4, para. 0069) with the probe and with the flow passage (56) for pumping fluid in the container through the probe and the flow passage, and fluid return means (Figure 6, 112, 114, 116) formed (116) on the probe for returning recirculated fluid to the fluid in the container such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container (Page 4, para. 0062, The flow of the re-circulated liquid...causes much less liquid turbulence and formation of air bubbles...).

Regarding claims 8-12, Priebe et al. disclose all of the features of the claimed invention except that the;

a) the cap includes a first key element and the connector includes a second key element configured to mate with the first key element,

b) sensor means for sensing when the first and second key elements are mated and for sensing when the first and second key elements are not mated,

c) the sensor means comprises a detector mounted on the connector and a detector affecting element mounted on the cap, the detector mounted on the connector

having two states, one state when the first and second key codes are mated and the cap and connector are coupled in a predetermined orientation and a second state when the first and second key codes are not mated and the cap and connector are not coupled in the predetermined orientation, and

d) controller means coupled with the sensor means and the pump means such that the controller means enables the pump means when the sensor means senses that the first and second key elements are mated and disables the pump means when the sensor means senses that the first and second key elements are not mated.

Osgar et al. ('921) disclose a dispensing system, used for photoresists (Col. 1, Lns. 5- 8), which are used in Semiconductor manufacturing processes, that teaches the use of;

a) the cap includes a first key element and the connector includes a second key element configured to mate with the first key element (Col.1, Lns. 51-51),

b) sensor means for sensing when the first and second key elements are mated and for sensing when the first and second key elements are not mated (Col.1, Lns. 60-62),

c) the sensor means comprises a detector mounted on the connector and a detector affecting element mounted on the cap, the detector mounted on the connector having two states, one state when the first and second key codes are mated and the cap and connector are coupled in a predetermined orientation and a second state when the first and second key codes are not mated and the cap and connector are not coupled in the predetermined orientation (Col. 2, Lns. 1-13), and

d) controller means coupled with the sensor means and the pump means such that the controller means enables the pump means when the sensor means senses that the first and second key elements are mated and disables the pump means when the sensor means senses that the first and second key elements are not mated (Col. 2, Lns. 62 –67 onto Col. 3, Lns. 1-7).

In view of the Osgar et al. ('921) patent, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize the cap having a first and second key element, the sensor means and the controller means of Osgar et al.('921) onto the dispensing system of Priebe et al. in order to ensure that personnel will not attach the wrong chemical to the wrong process at the wrong time as taught by Osgar ('921, Col. 1, Lns.40 – 42).

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory

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double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1 and 13 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 8 of copending Application No. 10/247107 in view of Osgar (US 5,875,921).

Claim 1 of application 10/247107 shows all of the features of the claimed invention except the cap, and the pump. The connector and dip tube of application 10/247107 is seen as the same structure as the connector head and probe of the instant application. Osgar et al. ('921) shows a cap (62) and a pump (18). It would have been obvious to one of ordinary skill in the art at the time of invention to utilize a cap, and pump as taught by Osgar et al. ('921), onto the opening of the container (vessel) of application 10/247107 in order to permit removal of the connector head for service. It would have been obvious to provide a pump to move fluid.

Claim 13 is substantially identical to claim 8 of application 10/247107.

This is a provisional obviousness-type double patenting rejection.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rauworth et al. (US 5,108,015), Kawai et al. (US 6,237,809), Billigmeier (US 4,142,545) and Schwab (US 2,065,829) all disclose similar systems.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 8AM - 5PM M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hepperle can be reached on (571) 272-4913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CP



28 December 2005



STEPHEN M. HEPPERLE
PRIMARY EXAMINER
ART UNIT 347

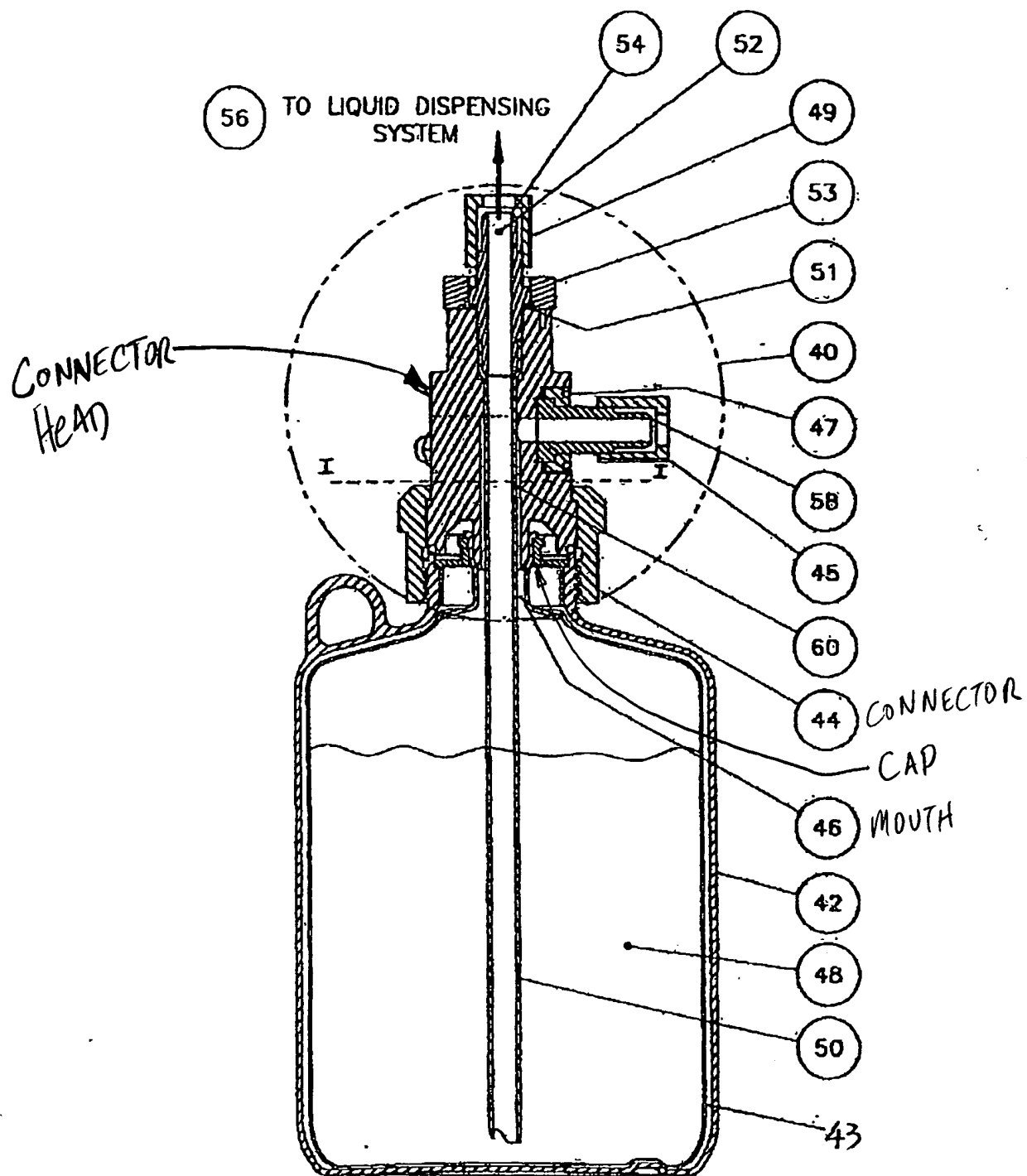


Figure 2